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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,379	12/03/2003	Frederic Guerin	PO8040/PS-1136	5580

34947 7590 01/25/2006

LANXESS CORPORATION  
111 RIDC PARK WEST DRIVE  
PITTSBURGH, PA 15275-1112

EXAMINER
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FIGUEROA, JOHN J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/726,379

Applicant(s)

GUERIN ET AL.

Examiner

John J. Figueroa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/05/2002.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-4 and 6-9 are provisionally rejected on the ground of nonstatutory double patenting over claims 1-4 and 12-13 of copending Application No. 10/926,532 (hereinafter '352 appln.'; see U.S. Pat. Appln. Publ. No. 2005/0027075 A1). This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: the subject matter of the claims in both applications encompass nitrile rubber polymers, and articles comprising thereof, having a Mooney viscosity of less than 25.

The claims of the '352 appln. are drawn to a nitrile rubber, and articles comprising thereof, having a Mooney viscosity of less than 25 and a specified molecular weight (Mw) and polydispersivity index. The rejected claims of the instant application recite an adhesive polymer composite comprising a nitrile rubber polymer, and articles comprising thereof, having a Mooney viscosity below 30 and *optionally* at least one filler and *optionally* at least one cross-linking agent. Thus, because the filler and the cross-linking agent are optional, the claims can be interpreted as drawn to a nitrile rubber

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*compound* as further evidenced by claims 7-9 which are apparently referring to the *composite* as a compound.

Moreover, because the claims in the instant case do not recite limitations regarding the Mw or polydispersivity index of the nitrile rubber polymers, the broadest interpretation of the instant claims provides for nitrile rubber polymers having any range for the Mw and/or polydispersivity index, as long as the nitrile rubber polymer has a Mooney viscosity below 30 (which includes, of course, nitrile rubber polymers having a Mooney viscosity below 25).

### ***Claim Objections***

Claims 1-9 are objected to because of the following informalities:

Claim 1 is drawn to an adhesive polymer composite comprising a nitrile rubber polymer having a Mooney viscosity below 30 and *optionally* at least one filler and *optionally* at least one cross-linking agent. Claim 6 recites an article comprising an adhesive comprising at least one nitrile polymer. Thus, because the filler and the cross-linking agent are both optional in claim 1, and are not recited in claim 6, the claims do not require the composite to contain them. Accordingly, claim 1 can be interpreted as drawn to an adhesive polymer composite containing only said nitrile rubber polymer. It is unclear as to whether the instant claims are drawn to a *composite* or a *compound*.

In addition, claim 5 is drawn to a process for preparing a polymer composite comprising mixing at least one of said nitrile rubber polymer, with *optionally* a filler and an *optionally* a cross-linking agent. Thus, as previously discussed, if the optional

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components are not present, then the process is drawn to mixing a single component (the nitrile rubber polymer). It is not clear as to what exactly encompasses "mixing" a single component in a process.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 7 recite the limitation "compound" in line 2, whereas claims 8 and 9 recite "compound" in line 1. There is insufficient antecedent basis for this limitation in the claims.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 4-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 2,714,562 to John F. Hechtman (hereinafter 'Hechtman').

Hechtman discloses a composition, used as a self-adhering material, containing a mixture of a natural rubber resin and a low-molecular weight acrylic nitrile-butadiene copolymer that exhibits excellent adhesion, has good cohesive properties and adheres to paper, cellophane, metal and the like. (Col. 2, lines 35-43.) Hechtman discloses that the acrylic nitrile copolymer has a Mooney viscosity between 10 and 35 at 212°F (100°C) and that it can be made by the polymerization in aqueous emulsion of a monomeric mixture consisting of a butadiene monomer and 20-50% of acrylonitrile. (Col. 2, lines 41-55).

In addition, Hechtman discloses a self-sealing wrapping paper containing a wrapping sheet and the self-adhering material discussed above as an adhesive coating. (Col. 1, lines, 15-25; col. 2, lines 3-22 and col. 4, lines 36-53).

Thus, the claims are anticipated by Hechtman.

7. Claims 1 and 4-9 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 3,600,268 to Hori et al. (hereinafter 'Hori').

Hori disclose a surface protective sheet comprising a plastic sheet layer (e.g. PVC) and an adhesive layer provided on one side of the plastic sheet, wherein the adhesive layer comprises a cured acrylic rubber having a Mooney viscosity of 20 or more at 100°C. (Col. 1, lines 11-29; col. 2, lines 53-63; col. 8, line 71 to col. 9, line 8). Hori discloses that the acrylic polymer comprises a copolymer of an ester of acrylic acid and acrylonitrile. (Col. 2, line 54 to col. 3, line 5; col. 9, lines 1-7).

Hori further discloses that a low-friction layer, such as those conventionally used for the backing surface of a pressure sensitive adhesive tape, can be applied to the surface of the protective sheet and rolled to form a roll (tape). (Col. 3, lines 44-65).

Example 4 in Hori discloses an acrylic-nitrile adhesive copolymer prepared by forming an emulsified mixture of acrylonitrile, butyl acrylate, ammonium peroxide, sodium metabisulfite and sodium laurate. The acrylic-nitrile rubber formed had a Mooney viscosity of 24 at 100°C. (Example 4; col. 8, lines 15-55). The acrylic-nitrile rubber was applied to a PVC film using dicumyl peroxide to form a coated sheet. (Example 4; col. 1, lines 32-47).

Thus, the claims are anticipated by Hori.

8. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 2,656,292 to Hoover (hereinafter 'Hoover').

Hoover discloses liners for use in the handling, storage and transportation of tacky materials to prevent the sheets from adhering to each other wherein the liners can be used in preparing rolls (tapes) of tacky sheet rubber. (Col. 1, lines 1-11; Figure 3). The liner can contain a homogenous mixture of a vinyl halide polymer with an interpolymers of a butadiene-1,3 hydrocarbon and an acrylic nitrile. (Col. 2, lines 34-52). The interpolymers contains a copolymer of butadiene-1,3 and acrylonitrile have a Mooney viscosity as low as 3-20 at 212°F (100°C) and preferred low viscosity interpolymers have a Mooney viscosity value below 35. (Col. 3, lines 30-54; col. 3, line 71 to col. 4, line 10; col. 6, lines 42-57)



In Example III, Hoover discloses a latex-like aqueous dispersion containing 30 parts of a butadiene-1,3 acrylonitrile copolymer having a Mooney viscosity of 15-20 prepared by mixing 66% butadiene 1,3 and 33% acrylonitrile. The copolymer solution is subsequently mixed with a PVC dispersion to form an interpolymer that is used to form a flexible film. (Col. 3, lines 1-9; col. 4, line 55 to col. 5, line 2).

Thus, the claims are anticipated by Hoover.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

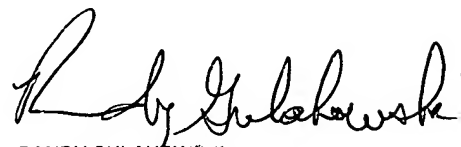
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571) 272-8916. The examiner can normally be reached on Mon-Thurs & alt. Fri 8:00-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JJF/RG

A handwritten signature in black ink, appearing to read "Randy Gulakowski". The signature is fluid and cursive, with the first name "Randy" and last name "Gulakowski" clearly distinguishable.

RANDY GULAKOWSKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700